



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Public Benefits Program Grant - Wallace Computer Services, Inc., Phase II Energy Audit

MEETING DATE: December 16, 1998

PREPARED BY: Electric Utility Director

RECOMMENDED ACTION: That the City Council approve a Public Benefits Program grant to Wallace Computer Services, Inc., for a Phase II Energy Audit for a maximum of \$5,000.

BACKGROUND INFORMATION: During a November 17, 1998 Shirtsleeve Session, the Electric Utility Department presented an overview of the Public Benefits Program (PBP) and suggested expenditure of PBP funds over the ensuing 4 years.

As indicated in the Council Communication for the above presentation, several specific qualifying proposals would be presented prior to year's end for PBP funding consideration. One such proposal recommended for funding is a Phase II Energy Audit/Survey for Wallace Computer Services, Inc. (1831 S. Stockton Street), to be performed by Energy Masters, International (EMI).

EMI has partnered with the City of Lodi Electric Utility, as well as other NCPA cities, to effectively utilize Public Benefit Program funds. Energy audits/surveys are one such use of the Public Benefit Program funds. EMI has over 20 years of expertise in the energy management industry, and is recognized as a national leader in the electric industry.

Wallace Computer Services is one of Lodi's largest individual electric consumers, with over 75 employees working three shifts around the clock, Monday through Friday. Wallace Computer Services is planning to remove the two existing 60-ton air conditioning units serving the facility, and replace them with high efficient units during the first quarter of 1999. This equipment upgrade, coupled with several other potential energy conservation measures, qualify as excellent candidates for Public Benefit Program funding.

Several weeks ago, the City of Lodi Electric Utility Department and representatives from EMI, conducted a Phase I Energy Audit/Survey of the Wallace, Inc. facility. A Phase I energy audit provides a general overview of an organization's energy use. A Phase I study also assists in determining whether or not there is a need to conduct a Phase II energy assessment, which is a more comprehensive analysis of energy usage, as well as recommendations for installation of energy conservation equipment and materials.

Based upon the Phase I energy survey of Wallace, Inc., it has been determined that a Phase II energy assessment is required to outline specific energy-saving measures for this customer's benefit. The funding request for this particular Phase II energy audit and recommendation proposal is \$5,000.00

The Electric Utility Department has reviewed the materials provided by EMI in their Phase I energy study of the Wallace Computer Services, Inc. facility, and recommends approval of this funding request as a qualifying component under the proposed PBP.

APPROVED: _____


H. Dixon Flynn -- City Manager



CITY OF LODI

COUNCIL COMMUNICATION

FUNDING: 16064 – Public Benefits Program Fund (Category: Demand Side management)

FUNDING APPROVAL:

Vicky McAthie
Vicky McAthie, Finance Director

Alan N. Vallow
Alan N. Vallow
Electric Utility Director

PREPARED BY: Rob Lechner, Manager of Customer Programs

ANV/RL/lst

C: City Attorney

APPROVED: _____
H. Dixon Flynn -- City Manager



SECTION I - EXECUTIVE SUMMARY

The City of Lodi Electric Department and Energy Masters International, Inc. (EMI) sincerely appreciates the opportunity to present this preliminary "energy efficiency" proposal to Wallace Computer Services, Inc. for the feasibility and evaluation of an energy and operational cost savings program at the Lodi facility.

This preliminary energy efficiency analysis provides Wallace with the opportunity to address aging and inefficient heating, ventilating and air conditioning (HVAC), lighting, environmental control systems, process mechanical equipment and operational conditions and describes cost saving recommendations associated with system improvements.

In this proposal document we describe what we can accomplish and present a preliminary cost-to-savings ratio analysis.

If the recommendations we have made and cost/savings ratio is attractive, we propose that Wallace commit to a comprehensive in-depth analysis that will include precise measurements of existing conditions, computer modeling of energy efficiency measures, engineered specifications and complete detailed cost-to-savings financial information.

An Intelligent Approach to Energy Planning

As the deregulation of the electric industry unfolds, a majority of large energy users are striving to get their arms around their energy supply and demand side management plans. Media and industry attention on the electricity commodity market has caused many firms to scrutinize the operating efficiency of their energy consuming equipment. Further, because utilities such as Lodi Electric are striving to provide their customers with additional value-added services many energy users are experiencing the positive effects of the changing role of the traditional utility provider. The result of all of this is that Wallace Computers Services, Inc. has been selected to participate in this "energy efficiency" partnership program developed by Lodi Electric. With the "demand side" measures we are proposing, Wallace is poised to take a major step toward getting the best value for its energy dollar.

Maximizing Available Utility Incentives

Concurrent with the installation of the proposed energy efficiency program, Lodi Electric will dedicate rebate money directly to Wallace Computer to completely fund the cost of the comprehensive in-depth engineering analysis and help buy down the cost of the project. The Lodi Electric rebate program is developed and budgeted on an annual basis to assist it's customers in becoming as technically and operationally efficient and productive as possible.



Preliminary Recommendations

1. Upgrade/retrofit older inefficient lighting systems, replace high bay system, install motion sensor controls
2. Upgrade/replace air conditioning units with high efficiency variable frequency drives (VFDs) on specified motors and compressors, and / or new high efficiency units
3. Install ground source heat pump system for production area
4. Installation of dedicated packaged or split system direct expansion cooling units
5. Improve the operating efficiency of the plant's air compressor system
6. Install insulation over north office
7. Integrate an energy management system (EMS) into the building's operations systems

These measures represent an immediate means to reduce energy consumption and will create an improved, more productive work environment for Wallace employees.

Savings and Payback

The preliminary "demand side" energy efficiency measures we are proposing will reduce annual energy costs by \$100,629, or about 41%. Annual maintenance and operational savings are calculated to be \$8,072. **Total potential annual savings \$108,701.** Estimated project payback 4.04 years. Further, the City of Lodi Electric Department will offer incentive money directly to Wallace Computer Services, Inc. for the installation of an energy efficiency project.

Background and Operations Overview

Wallace is acknowledged as a national leader in the field of information management products, services and solutions, with several facilities located throughout the country. Its product line includes commercial printing, business forms, labels, direct mail and office products. Wallace, the nation's fifth largest printer in North America, through solid system infrastructure, innovative management tools, high customer acceptance standards, outstanding distribution system and wide product diversity is positioned for continued success and growth.



Architecture

The Lodi facility was originally occupied in 1983 and expanded in 1986 when the Production Area was completed. The current facilities now occupies approximately 140,000 total square feet comprised of the following:

Space	Square Footage (approx.)	Space Type	Hours of Occupation
Administrative	12,000	Heating & Cooling	7 AM to 8 PM, Mon.-Fri.
Production	30,000	Heating & Cooling	24 hours, Mon.-Fri., 2 Sat./mo.
Warehouse	98,000	Heating Only	7 AM to 6 PM or 11 PM, Mon.-Fri.

The facility employs approximately 86 full-time employees and 10 to 12 temporary employees.

The building is constructed of metal panels on studs with gypsum wall board. The facility has high ceilings (approximately 30 feet) with the exception of the Administrative Area that has a drop T-bar ceiling.

Lighting

Space	Lighting Fixture Type	Approx. Quantity
Administrative/Office	4 foot, 4 lamp fluorescent troffers *	195
Production	8 foot, 2 lamp high output fluorescent strips	242
Warehouse	400 watt metal halide high bays	241

* Note: 45 fixtures in the general administration areas in the front of the building have had two lamps removed. Each fixture has two ballasts that are still drawing power.

Heating, Ventilating and Air Conditioning

Administrative Area: Six (6) single zone packaged rooftop units with direct expansion cooling and direct-fired natural gas heating provide space comfort to the Offices and Pre-Press Areas. These units are controlled by programmable thermostats with night setback capability and are operated Monday through Friday, 7 AM to 5 PM.



Production Area: Two (2) 60 Ton single zone packaged heating/cooling with direct expansion cooling and direct-fired natural gas heating (disabled) provide space comfort to the Production Area and offices located in Production Area. These units are operated 24 hours a day, five days per week. Three (3) natural gas-fired unit heaters are also present.

Warehouse Area: Eleven (11) natural gas-fired unit heater provide space heating. Ten (10) wall mounted fans, most with reversing capability, can provide air circulation by exhausting building air or brining in outside air.

Process Equipment

Two (2) 75 HP air compressors provide compressed air to process equipment in the Production Area, although only one compressor runs at a time. Other printing process equipment like conveyors, cutters, blowers and dryers comprise a large portion of the electrical load.

RESOLUTION NO. 98-185

A RESOLUTION OF THE LODI CITY COUNCIL AUTHORIZING THE
CITY MANAGER TO PROVIDE A PUBLIC BENEFITS CHARGE (PBC)
GRANT TO WALLACE COMPUTER SERVICES, INC.

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WHEREAS, the State has mandated that beginning January 1, 1998, the City of Lodi is obligated to fund various programs through a Public Benefits Charge (PBC) based on a historical electric revenue requirement; and

WHEREAS, the requirement amount to approximately \$1 Million per year that must be dedicated to qualifying programs such as energy efficiency. A further stipulation is that these efforts must be done on the customer's side of the meter in order to qualify; and

WHEREAS, Wallace Computer Services is planning to remove the two existing 60-ton air conditioning units serving the facility, and replace them with high efficient units during the first quarter of 1999; and

WHEREAS, this equipment upgrade, coupled with several other potential energy conservation measures, qualify as excellent candidates for Public Benefit Program funding; and

WHEREAS, the City of Lodi Electric Utility Department and representatives from Energy Masters, International conducted a Phase 1 Energy Audit/Survey of the Wallace, Inc. facility; and

WHEREAS, following the Electric Utility Department's review of Wallace Computer Services, Inc.'s, energy audit, it was determined that Phase II energy assessment is required to outline specific energy-saving measures; and

WHEREAS, the Electric Utility Department recommends that the City provide a PBC grant of \$5,000.00 for the Phase II Energy Assessment, and include the cost of the grant as part of the City's required PBC outlay.

BE IT RESOLVED, that the Lodi City Council hereby authorizes the City Manager to provide a Public Benefits Charge (PBC) Grant in the amount of \$5,000.00 to Wallace Computer Services, Inc.,

Dated: December 16, 1998

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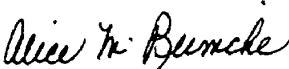
I hereby certify that Resolution No. 98-185 was passed and adopted by the Lodi City Council in a regular meeting held December 16, 1998 by the following vote:

AYES: COUNCIL MEMBERS – Hitchcock, Mann, Nakanishi, Pennino and Land
(Mayor)

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None


ALICE M. REIMCHE
City Clerk